

Title (en)

AN EBULLATED BED PROCESS FOR HIGH CONVERSION OF HEAVY HYDROCARBONS WITH A LOW SEDIMENT YIELD

Title (de)

FLIESSBETTVERFAHREN FÜR HOHE UMWANDLUNG VON SCHWEREN KOHLENWASSERSTOFFEN MIT SEDIMENTARMER AUSBEUTE

Title (fr)

PROCÉDÉ À LIT BOUILLONNANT DESTINÉ À LA CONVERSION ÉLEVÉE D'HYDROCARBURES LOURDS PRÉSENTANT UN FAIBLE RENDEMENT EN SÉDIMENTS

Publication

EP 3448964 A4 20191113 (EN)

Application

EP 17790172 A 20170424

Priority

- US 201662327057 P 20160425
- US 2017029059 W 20170424

Abstract (en)

[origin: US2017306250A1] An ebullated bed process for the hydroconversion of heavy hydrocarbon feedstocks that provides for high conversion of the heavy hydrocarbon with a low sediment yield. The process uses for its catalyst bed an impregnated shaped ebullated bed catalyst having a low macroporosity and a geometry such that its characteristic cross section perimeter-to-cross sectional area is within a specifically defined range.

IPC 8 full level

C10G 47/00 (2006.01); **C10G 47/26** (2006.01)

CPC (source: EP KR US)

B01J 23/28 (2013.01 - KR); **B01J 23/883** (2013.01 - EP US); **B01J 27/19** (2013.01 - EP US); **B01J 35/40** (2024.01 - EP US); **B01J 35/50** (2024.01 - EP KR US); **B01J 35/635** (2024.01 - EP US); **B01J 35/66** (2024.01 - EP US); **B01J 37/0009** (2013.01 - EP US); **B01J 37/08** (2013.01 - EP US); **C10G 47/12** (2013.01 - US); **C10G 47/26** (2013.01 - US); **C10G 49/12** (2013.01 - US); **C10G 65/00** (2013.01 - KR); **C10G 65/00** (2013.01 - US); **C10G 2300/202** (2013.01 - EP KR US); **C10G 2300/208** (2013.01 - EP KR US); **C10G 2300/70** (2013.01 - EP KR US)

Citation (search report)

- [X] WO 2013177018 A1 20131128 - SHELL OIL CO [US], et al
- [A] US 2014027344 A1 20140130 - HARRIS EVERETTE [US], et al
- See also references of WO 2017189396A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

US 201715495129 A 20170424; CA 3021330 A 20170424; CN 201780025503 A 20170424; EP 17790172 A 20170424; JP 2019507067 A 20170424; KR 20187030428 A 20170424; TW 106113355 A 20170421; US 2017029059 W 20170424; ZA 201806704 A 20181009